

## Fault Analysis SSE M-ASAT Driver System (C-Band)

SatService GmbH Return Fax Number	*49 7738 9700 5
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Company	Company
Contact	Point of Contact
Phone Number	Phone Number
Fax Number	Fax Number

Part Number Driver	305-040061-500
S/N Number Driver	2029

<b>Customer Description of Failure</b>
<p style="text-align: center;"><b>Provide a short failure description</b></p>

Specify the Satellite/Transponder Tx/Rx Frequency used for Operation		
Transmit Frequency	(e.g. 6260,5MHz):	<b>6.175 MHz</b>
Receive Frequency	(e.g. 4035,7MHz):	<b>3.950 MHz</b>

Specify the Modulator and Demodulator IF Frequency used for Operation		
Modulator IF Frequency	(e.g. 70,5MHz):	<b>70 MHz</b>
Demodulat. IF Frequency	(e.g. 60,7MHz):	<b>70 MHz</b>

Specify the programmed Rx/Tx Transceiver Frequency (M&C or Dip Switches)		
Transceiver Tx Frequency	(e.g. 6260MHz):	<b>6.175 MHz</b>
Transceiver Rx Frequency	(e.g. 4035MHz):	<b>3.950 MHz</b>

Transceiver Programming via M&C interface or via Dip Switches?		
M&C RS232/485 Port	(indicate Yes/No):	<b>Yes</b>
Dip Switches	(indicate Yes/No):	<b>No</b>

Indicate Synthesizer #1 Dip Switch Settings (On = 1 Off = 0)

	Rem	Ext	F10	F8	F4	F2	F1	P4	P2	P1	N8	N4	N2	N1
1/0	-	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

Indicate Synthesizer #2 Dip Switch Settings (On = 1 Off = 0)

	Rem	Ext	F10	F8	F4	F2	F1	P4	P2	P1	N8	N4	N2	N1
1/0														

Indicate the Alarm LED's which are illuminated														

If possible measure via Power Meter and/or Spectrum Analyzer following set of Parameters and generate Plots

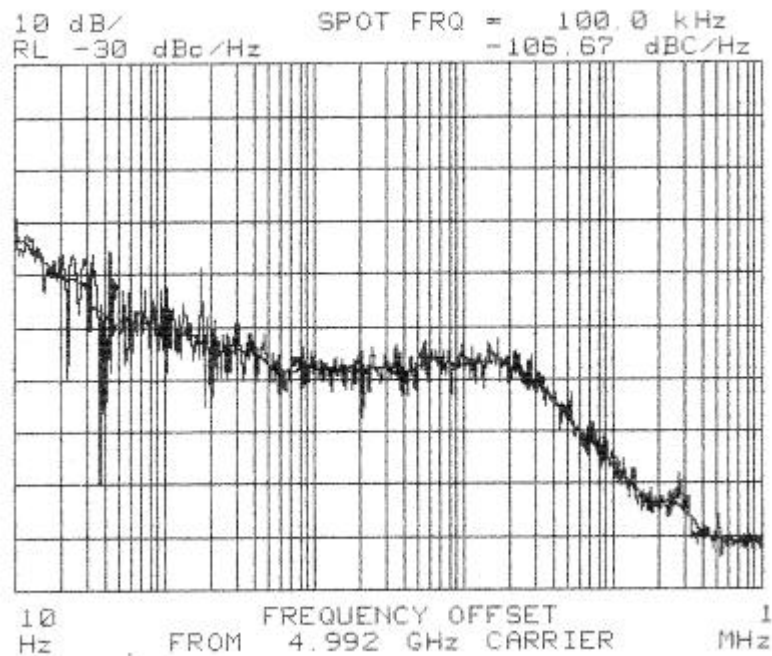
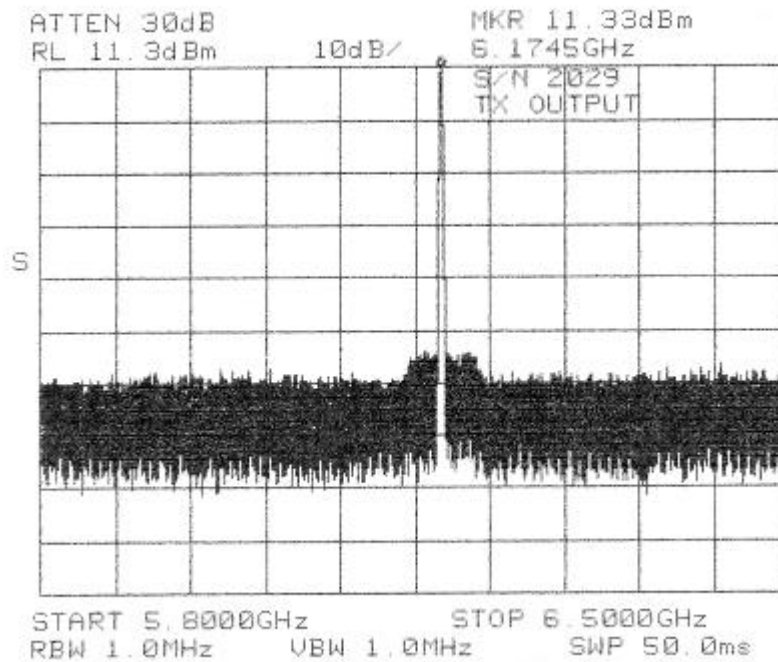
Measured Tx output level -30dBm Input Drive	(i. g. 4dBm SSPA Driver): (i. g. 8dBm TWT Driver):	<b>+5 dBm</b>
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Measure Frequency at Power Level of LNC Local Oscillators at Transceiver Output (HF PLO)		
HF PLO Frequency	(e. g. 5077,5MHz):	<b>4.992,5 MHz</b>
HF PLO Power Level	(e. g. 14dBm):	<b>13,8 dBm</b>

Verify Transceiver Rx Chain		
Rx IF Input Frequency	(e. g. 1042.5MHz):	<b>1.052,5 MHz</b>
RX IF Input Level	(e. g. -40dBm):	<b>-40 dBm</b>
70MHz IF Output Level	(e. g. -5dBm):	<b>-5 dBm</b>

Measure with a Volt Meter the LNC DC Voltages		
Voltage at J1 Rx IF	(e. g. +15VDC):	<b>+14,7 dBm</b>

- **Transmit Carrier: Spectrum and Phase Noise**



- 5 GHz LO: Spectrum and Phase Noise

